

What is claimed is:

1. A connector assembly comprising:
a pin extending from a pin distal end to a pin proximal end, and having a pin
5 intermediate portion therebetween;
at least one ring extending from a ring distal end to a ring proximal end and
having a ring intermediate portion therebetween;
a molded insulative sleeve disposed between the pin and the ring, the sleeve
mechanically coupling the pin and the ring, and the insulative sleeve insulating the pin
10 from the ring, the molded sleeve having a channel therein.
2. The connector assembly as recited in claim 1, wherein the pin has a first outer
diameter and the ring has a second outer diameter, and the first diameter is
substantially the same as the second diameter.
- 15 3. The connector assembly as recited in claim 1, further comprising a second
ring, and the insulative sleeve is between the pin, the first ring and the second ring, the
second ring mechanically coupled to the pin by the sleeve.
- 20 4. The connector assembly as recited in claim 1, further comprising at least one
conductor disposed within the channel.
5. The connector assembly as recited in claim 4, wherein the channel is wider
than the at least one conductor.
- 25 6. The connector assembly as recited in claim 1, wherein the pin has at least one
chamfer formed thereon.
7. The connector assembly as recited in claim 4, wherein the channel is a spiral
30 channel.

8. The connector assembly as recited in claim 4, wherein the channel is back-filled with material.

5 9. A connector assembly comprising:
a pin extending from a pin distal end to a pin proximal end, and having a pin intermediate portion therebetween;
at least one ring extending from a ring distal end to a ring proximal end and having a ring intermediate portion therebetween;
10 a molded insulative sleeve between the pin and the ring; and
at least one conductor disposed within a portion of the sleeve.

10. The connector assembly as recited in claim 9, wherein an interior surface of the ring includes grooves formed thereon

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11. The connector assembly as recited in claim 10, wherein the grooves are oblique to a longitudinal axis of the ring.

12. The connector assembly as recited in claim 9, further comprising a second ring, and a third ring, and the insulative sleeve is between the pin, the first ring, the second ring, and the third ring, the second ring and the third ring mechanically coupled to the pin by the sleeve.

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13. The connector assembly as recited in claim 9, wherein the at least one ring includes at least one chamfer.

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14. A method comprising:
forming a terminal pin;
forming at least one ring; and

molding a sleeve between the pin and the ring, including mechanically coupling the pin with the ring; and
forming at least one channel within the sleeve.

5 15. The method as recited in claim 14, further comprising coupling a lead with the terminal pin, the at least one ring, and the sleeve to form an assembly having an isodiametric outer diameter.

10 16. The method as recited in claim 14, further comprising forming a second ring, and molding the sleeve between the ring, the terminal pin, and the second ring.

17. The method as recited in claim 14, further comprising disposing at least one conductor within the channel of the sleeve.

15 18. The method as recited in claim 14, wherein forming the channel includes forming a spiral channel within the sleeve.

19. The method as recited in claim 14, further comprising disposing at least one conductor within the channel of the sleeve and backfilling the channel.
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20. The method as recited in claim 14, further comprising forming at least one chamfer in at least one of the at least one ring or the at least one terminal pin.